

Listing of Claims:

Claims 1-74 (Canceled).

75. (New) An image forming apparatus administration system,
comprising:

an image forming apparatus, located in a first local network
and connected to the Internet through a first firewall server of
5 the first local network;

an administration apparatus, located in a second local
network and connected to the Internet through a second firewall
server of the second local network; and

at least one relaying server, located outside the first
10 local network and the second local network and connected to the
Internet;

wherein:

the image forming apparatus comprises a transmitting
section which transmits first information representing a state of
15 the image forming apparatus to the relaying server;

the relaying server comprises a relaying storage for
storing the first information;

the administration apparatus comprises an accessing
section which accesses the relaying server to obtain the first
20 information stored in the relaying storage;

the administration apparatus comprises a transmitting section which transmits second information to the relaying server, said second information being stored in the relaying storage; and

25 the image forming apparatus comprises an accessing section which accesses the relaying server to obtain the second information from the relaying storage, and the image forming apparatus is controlled in accordance with the second information.

76. (New) The image forming apparatus administration system of claim 75, wherein:

5 the second information comprises ID information for identifying the image forming apparatus, and job information for causing the image forming apparatus to perform a predetermined action; and

the image forming apparatus, which is identified with the ID information, executes the predetermined action in accordance with the job information.

77. (New) The image forming apparatus administration system of claim 76, wherein:

the job information comprises at least an updating program or updating data for controlling the image forming apparatus;

5 the image forming apparatus comprises an administrated storage which stores at least a program or data; and

 the image forming apparatus rewrites the program or data stored in the administrated storage with the updating program or updating data.

78. (New) The image forming apparatus administration system of claim 77, wherein the image forming apparatus obtains the updating program or updating data by downloading the updating program or updating data from the relaying server.

79. (New) The image forming apparatus administration system of claim 77, wherein the image forming apparatus does not access the relaying server while the updating program or updating data is rewritten in the image forming apparatus.

80. (New) The image forming apparatus administration system of claim 76, wherein:

 the image forming apparatus comprises a determining section which determines whether any said second information including
5 the ID information identifying the image forming apparatus is present on the relaying server; and

 the accessing section of the image forming apparatus obtains the second information from the relaying storage when the

determining section determines that the second information
10 including the ID information identifying the image forming
apparatus is present on the relaying server.

81. (New) The image forming apparatus administration system
of claim 75, wherein the transmitting section of each of the
image forming apparatus and the administration apparatus repeats
the transmission of the corresponding one of the first
5 information and the second information when the relaying server
does not receive the one of the first information and the second
information normally.

82. (New) The image forming apparatus administration system
of claim 75, wherein the first information comprises inherent
data of the image forming apparatus.

83. (New) The image forming apparatus administration system
of claim 82, wherein the inherent data comprises usage history
information of the image forming apparatus.

84. (New) The image forming apparatus administration system
of claim 83, wherein the usage history information comprises a
count number which is obtained by counting at least one of: a
number of image formation operations, a number of times of use of

5 at least one component of the image forming apparatus, a number of image formation operations for each size of a recording medium, number of recording mediums with images formed thereon, and a number of image formation operations for each function of the image forming apparatus.

85. (New) The image forming apparatus administration system of claim 82, wherein the inherent data comprises emergency information based on an error in the image forming apparatus.

86. (New) The image forming apparatus administration system of claim 85, wherein:

the image forming apparatus comprises a detecting section which detects the error, and which determines a seriousness of the error as one of temporary and serious; and

5

the image forming apparatus transmits the emergency information to the relaying server when the error is determined to be serious.

87. (New) The image forming apparatus administration system of claim 82, wherein the image forming apparatus comprises an administrated storage which stores the inherent data transmitted to the relaying server in accordance with the second information.

88. (New) The image forming apparatus administration system of claim 82, wherein the image forming apparatus does not obtain the second information from the relaying server while the first information is transmitted to the relaying server.

89. (New) The image forming apparatus administration system of claim 82, wherein the transmitting section of the image forming apparatus repeats the transmission of the first information to the relaying server when the relaying server does not receive the first information normally.

90. (New) The image forming apparatus administration system of claim 75, wherein the accessing section of the image forming apparatus accesses the relaying server in accordance with a predetermined timing.

91. (New) The image forming apparatus administration system of claim 90, wherein the predetermined timing is at least one of: times at a predetermined time interval, a predetermined time of day, and a time at which a predetermined condition is satisfied.

92. (New) The image forming apparatus administration system of claim 75, wherein:

the at least one relaying server comprises a plurality of relaying servers;

5 the transmitting section of the image forming apparatus transmits the first information to a predetermined first relaying server of the plurality of relaying servers, and the accessing section of the image forming apparatus accesses the first relaying server; and

10 the transmitting section of the image forming apparatus transmits the first information to an alternative relaying server of the plurality of relaying servers, when it is not possible to transmit the first information to the first relaying server, and the accessing section of the image forming apparatus accesses the
15 alternative relaying server, when it is not possible to access the first relaying server.

93. (New) The image forming apparatus administration system of claim 75, wherein:

the at least one relaying server comprises a plurality of relaying servers, said plurality of relaying servers comprising
5 at least one child relaying server including a child relaying storage, and at least one parent relaying server including a parent relaying storage;

the accessing section of the image forming apparatus accesses the child relaying server through the Internet to obtain

10 information stored in the child relaying storage, and the
transmitting section of the image forming apparatus transmits the
first information to the child relaying server;

the accessing section of the administration apparatus
accesses the parent relaying server through the Internet to
15 obtain information stored in the parent relaying storage, and the
transmitting section of the administration apparatus transmits
the second information to the parent relaying server;

the parent relaying server comprises a transmitting section
which transmits the second information, which is transmitted from
20 the administration apparatus, to the child relaying server, which
stores the second information in the child relaying storage; and

the child relaying server comprises a transmitting section
which transmits the first information, which is transmitted from
the image forming apparatus, to the parent relaying server, which
25 stores the first information in the parent relaying storage.

94. (New) The image forming apparatus administration system
of claim 93, wherein:

the second information comprises one of object device ID
information for identifying the image forming apparatus
5 corresponding to the second information, and child server ID
information for identifying the child relaying server; and

the child relaying server comprises an accessing section which accesses the parent relaying server, and a determining section which determines whether to obtain the second information stored in the parent relaying storage, in accordance with the one of the object device ID information and the child server ID information included in the second information, such that the child relaying server accesses the parent relaying server to obtain the second information when one of: the object device ID information identifies the image forming apparatus accessing the child relaying server, and the child server ID identifies the child relaying server.

95. (New) The image forming apparatus administration system of claim 93, wherein:

the transmitting section of the administration apparatus transmits, to the parent relaying server, updating relaying information for rewriting a relaying program with an updating relaying program, said relaying program being provided for controlling the child relaying server; and

the child relaying server comprises an accessing section which accesses the parent relaying server to obtain the updating relaying program and to rewrite the relaying program, stored in the child relaying server, with the updating relaying program.

96. (New) The image forming apparatus administration system of claim 93, wherein:

the second information comprises transmission command information for instructing the image forming apparatus to transmit the first information;

the transmitting section of the image forming apparatus transmits the first information to the child relaying server in accordance with the transmission command information obtained through the child relaying server; and

the child relaying server transmits the first information, which is obtained from the image forming apparatus, to the parent relaying server.

97. (New) The image forming apparatus administration system of claim 93, wherein:

the at least one child relaying server comprises a plurality of child relaying servers;

the accessing section of the image forming apparatus accesses a predetermined first child relaying server of the plurality of child relaying servers; and

the accessing section of the image forming apparatus accesses one of an alternative child relaying server and the parent relaying server when it is not possible to access the first child relaying server.

98. (New) The image forming apparatus administration system of claim 93, wherein:

the at least one parent relaying server comprises a plurality of parent relaying servers;

5 the child relaying server comprises an accessing section which accesses the parent relaying servers, and accesses a predetermined first parent relaying server of the plurality of parent relaying servers; and

10 the accessing section of the child relaying server accesses an alternative parent relaying server when it is not possible to access the first parent relaying server.

99. (New) The image forming apparatus administration system of claim 93, wherein the child relaying server comprises an accessing section which accesses the parent relaying server, and accesses the parent relaying server at a predetermined timing.

100. (New) The image forming apparatus administration system of claim 99, wherein the predetermined timing is at least one of: times at a predetermined time interval, and a predetermined time of day.

101. (New) The image forming apparatus administration system of claim 75, wherein the relaying server creates

information in accordance with the first information, and the administration apparatus obtains the information created by the relaying server.

102. (New) The image forming apparatus administration system of claim 101, wherein:

the image forming apparatus transmits a report for notifying of a completion of a predetermined operation to the relaying
5 server; and

the administration apparatus obtains the state of the image forming apparatus by accessing the relaying server at a predetermined timing.

103. (New) An image forming apparatus administration system, comprising:

an image forming apparatus, located in a first local network and connected to the Internet through a first firewall server of
5 the first local network;

an administration apparatus, located in a second local network and connected to the Internet through a second firewall server of the second local network; and

at least one relaying server, located outside the first
10 local network and the second local network and connected to the Internet;

wherein:

the image forming apparatus comprises a transmitting
section which transmits first information representing a state of
15 the image forming apparatus to the relaying server;

the relaying server comprises relaying storage for
storing the first information; and

the administration apparatus comprises an accessing
section which accesses the relaying server to obtain the first
20 information stored in the relaying storage.

104. (New) The image forming apparatus administration
system of claim 103, wherein the transmitting section of the
image forming apparatus repeats the transmission of the first
information to the relaying server when the relaying server does
not receive the first information normally.

105. (New) The image forming apparatus administration
system of claim 103, wherein the first information comprises
inherent data of the image forming apparatus.

106. (New) The image forming apparatus administration
system of claim 105, wherein the inherent data comprises usage
history information of the image forming apparatus.

107. (New) The image forming apparatus administration system of claim 106, wherein the usage history information comprises a count number which is obtained by counting at least one of: a number of image formation operations, a number of times
5 of use of at least one component of the image forming apparatus, a number of image formation operations for each size of a recording medium, number of recording mediums with images formed thereon, and a number of image formation operations for each function of the image forming apparatus.

108. (New) The image forming apparatus administration system of claim 105, wherein the inherent data comprises emergency information based on an error in the image forming apparatus.

109. (New) The image forming apparatus administration system of claim 108, wherein:

the image forming apparatus comprises a detecting section which detects the error, and which determines a seriousness of
5 the error as one of temporary and serious; and

the image forming apparatus transmits the emergency information to the relaying server when the error is determined to be serious.

110. (New) The image forming apparatus administration system of claim 105, wherein the image forming apparatus comprises an administrated storage which stores the inherent data transmitted to the relaying server in accordance with the second information.

111. (New) The image forming apparatus administration system of claim 105, wherein the image forming apparatus does not obtain the second information from the relaying server while the first information is transmitted to the relaying server.

112. (New) The image forming apparatus administration system of claim 105, wherein the transmitting section of the image forming apparatus repeats the transmission of the first information to the relaying server when the relaying server does not receive the first information normally.

113. (New) The image forming apparatus administration system of claim 103, wherein the accessing section of the image forming apparatus accesses the relaying server in accordance with a predetermined timing.

114. (New) The image forming apparatus administration system of claim 113, wherein the predetermined timing is at least one of: times at a predetermined time interval, a predetermined time of day, and a time at which a predetermined condition is satisfied.

115. (New) The image forming apparatus administration system of claim 103, wherein:

the at least one relaying server comprises a plurality of relaying servers;

5 the transmitting section of the image forming apparatus transmits the first information to a predetermined first relaying server of the plurality of relaying servers, and the accessing section of the image forming apparatus accesses the first relaying server; and

10 the transmitting section of the image forming apparatus transmits the first information to an alternative relaying server of the plurality of relaying servers, when it is not possible to transmit the first information to the first relaying server, and the accessing section of the image forming apparatus accesses the
15 alternative relaying server, when it is not possible to access the first relaying server.

116. (New) The image forming apparatus administration system of claim 103, wherein:

the at least one relaying server comprises a plurality of relaying servers, said plurality of relaying servers comprising
5 at least one child relaying server including a child relaying storage, and at least one parent relaying server including a parent relaying storage;

the transmitting section of the image forming apparatus transmits the first information to the child relaying server;

10 the image forming apparatus comprises an accessing section which accesses the child relaying server through the Internet to obtain information stored in the child relaying storage;

the accessing section of the administration apparatus accesses the parent relaying server through the Internet to
15 obtain information stored in the parent relaying storage;

the administration apparatus comprises a transmitting section which transmits second information to the parent relaying server;

the parent relaying server comprises a transmitting section
20 which transmits the second information, which is transmitted from the administration apparatus, to the child relaying server, which stores the second information in the child relaying storage;

the child relaying server comprises a transmitting section which transmits the first information, which is transmitted from

25 the image forming apparatus, to the parent relaying server, which
stores the first information in the parent relaying storage; and
the accessing section of the image forming apparatus
accesses the child relaying server to obtain the second
information, and the image forming apparatus is controlled in
30 accordance with the second information.

117. (New) The image forming apparatus administration
system of claim 116, wherein:

the second information comprises one of object device ID
information for identifying the image forming apparatus
5 corresponding to the second information, and child server ID
information for identifying the child relaying server; and
the child relaying server comprises an accessing section
which accesses the parent relaying server, and a determining
section which determines whether to obtain the second information
10 stored in the parent relaying storage, in accordance with the one
of the object device ID information and the child server ID
information included in the second information, such that the
child relaying server accesses the parent relaying server to
obtain the second information when one of: the object device ID
15 information identifies the image forming apparatus accessing the
child relaying server, and the child server ID identifies the
child relaying server.

118. (New) The image forming apparatus administration system of claim 116, wherein:

the transmitting section of the administration apparatus transmits, to the parent relaying server, updating relaying information for rewriting a relaying program with an updating relaying program, said relaying program being provided for controlling the child relaying server; and

the child relaying server comprises an accessing section which accesses the parent relaying server to obtain the updating relaying program and to rewrite the relaying program, stored in the child relaying server, with the updating relaying program.

119. (New) The image forming apparatus administration system of claim 116, wherein:

the second information comprises transmission command information for instructing the image forming apparatus to transmit the first information;

the transmitting section of the image forming apparatus transmits the first information to the child relaying server in accordance with the transmission command information obtained through the child relaying server; and

10 the child relaying server transmits the first information,
which is obtained from the image forming apparatus, to the parent
relaying server.

120. (New) The image forming apparatus administration
system of claim 116, wherein:

the at least one child relaying server comprises a plurality
of child relaying servers;

5 the accessing section of the image forming apparatus
accesses a predetermined first child relaying server of the
plurality of child relaying servers; and

the accessing section of the image forming apparatus
accesses one of an alternative child relaying server and the
10 parent relaying server when it is not possible to access the
first child relaying server.

121. (New) The image forming apparatus administration
system of claim 116, wherein:

the at least one parent relaying server comprises a
plurality of parent relaying servers;

5 the child relaying server comprises an accessing section
which accesses the parent relaying servers, and accesses a
predetermined first parent relaying server of the plurality of
parent relaying servers; and

10 the accessing section of the child relaying server accesses
an alternative parent relaying server when it is not possible to
access the first parent relaying server.

122. (New) The image forming apparatus administration system of claim 116, wherein the child relaying server comprises an accessing section which accesses the parent relaying server, and accesses the parent relaying server at a predetermined timing.

123. (New) The image forming apparatus administration system of claim 122, wherein the predetermined timing is at least one of: times at a predetermined time interval, and a predetermined time of day.

124. (New) The image forming apparatus administration system of claim 103, wherein the relaying server creates information in accordance with the first information, and the administration apparatus obtains the information created by the relaying server.

125. (New) The image forming apparatus administration system of claim 124, wherein:

the image forming apparatus transmits a report for notifying
of a completion of a predetermined operation to the relaying
5 server; and

the administration apparatus obtains the state of the image
forming apparatus by accessing the relaying server at a
predetermined timing.

126. (New) An image forming apparatus, located in a first
local network and connected to the Internet through a first
firewall server of the first local network, said image forming
apparatus comprising:

5 a communication section which accesses a relaying server to
obtain information stored on the relaying server, said relaying
server being located outside the first local network and
connected to the Internet; and

a control section which controls the image forming apparatus
10 in accordance with said information;

wherein said information is transmitted to the relaying
server from an administration apparatus that is located in a
second local network and connected to the Internet through a
second firewall server of the second local network.

127. (New) The image forming apparatus administration
system of claim 126, wherein:

the information comprises ID information for identifying the image forming apparatus, and job information for causing the image forming apparatus to perform a predetermined action; and

the image forming apparatus, which is identified with the ID information, executes the predetermined action in accordance with the job information.

128. (New) The image forming apparatus administration system of claim 127, wherein:

the job information comprises at least an updating program or updating data for controlling the image forming apparatus;

5 the image forming apparatus comprises an administrated storage which stores at least a program or data; and

the image forming apparatus rewrites the program or data stored in the administrated storage with the updating program or updating data.

129. (New) The image forming apparatus administration system of claim 128, wherein the image forming apparatus obtains the updating program or updating data by downloading the updating program or updating data from the relaying server.

130. (New) The image forming apparatus administration system of claim 128, wherein the image forming apparatus does not

access the relaying server while the updating program or updating data is rewritten in the administrated storage.

131. (New) The image forming apparatus administration system of claim 127, wherein:

the image forming apparatus comprises a determining section which determines whether any said information including the ID information identifying the image forming apparatus is present on the relaying server; and

the accessing section of the image forming apparatus obtains the information from the relaying storage when the determining section determines that the information including the ID information identifying the image forming apparatus is present on the relaying server.

132. (New) The image forming apparatus of claim 126, wherein the communication section transmits status information representing a state of the image forming apparatus to the relaying server.

133. (New) The image forming apparatus of claim 132, wherein the image forming apparatus repeats the transmission of the status information when the relaying server does not receive the status information normally.

134. (New) The image forming apparatus of claim 132, wherein the status information comprises inherent data of the image forming apparatus.

135. (New) The image forming apparatus administration system of claim 134, wherein the inherent data comprises usage history information of the image forming apparatus.

136. (New) The image forming apparatus administration system of claim 135, wherein the usage history information comprises a count number which is obtained by counting at least one of: a number of image formation operations, a number of times
5 of use of at least one component of the image forming apparatus, a number of image formation operations for each size of a recording medium, number of recording mediums with images formed thereon, and a number of image formation operations for each function of the image forming apparatus.

137. (New) The image forming apparatus administration system of claim 134, wherein the inherent data comprises emergency information based on an error in the image forming apparatus.

138. (New) The image forming apparatus administration system of claim 137, wherein:

the image forming apparatus comprises a detecting section which detects the error, and which determines a seriousness of the error as one of temporary and serious; and

5 the image forming apparatus transmits the emergency information to the relaying server when the error is determined to be serious.

139. (New) The image forming apparatus administration system of claim 134, wherein the image forming apparatus comprises an administrated storage which stores the inherent data transmitted to the relaying server in accordance with said information.